



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

269T9231
Job Sheet 172431



Part No: 269T9231

Job Qty: 4 ea

Part Name: M/R Droop Stop Nut Spanner Wrench



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 2/16/18

Job Tracking No:

Due Date: 3/16/18

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: DWG 269T9231 REV:2 IPP REV A 18.02.14 NEW ISSUE RQ VERIFIED BY DP

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup	Run	Workcenter / Supplier	Lead Time	
					hrs	Hrs			
90	Start up Operation	4 Ea		3/15/18	0.00	0.00	Start Up Waterjet2		OK 18/02/20
100	Waterjet	4 pcs		3/15/18	0.08	0.67	Waterjet 2 OMAX		OK 18/02/20
110	QC	4 pcs		3/15/18	0.00	0.00	QC2 Waterjet-4		OK 18/02/20
120	CNC Vertical Machining	4 pcs		3/16/18	1.00	0.40	MORI NV5000-1		OK 18/03/08
130	QC	4 pcs		3/16/18	0.00	0.00	QC2 Machining-5		OK 18/03/08
140	QC	4 pcs		3/16/18	0.00	0.00	QC8 Machining-5		J.C. - L. 18-03-08
170	Outsource	4 pcs		3/16/18	0.00	0.00	Outsource1		At 18/03/29
200	Outsource	4 pcs		3/16/18	0.00	0.00	Outsource12		At 18-03-2018
210	Packaging	4 pcs		3/16/18	0.00	0.00	Packaging2		At 18/04/10
220	QC	4 pcs		3/16/18	0.00	0.00	QC6		11 APR 09 2018
230	Packaging	4 pcs		3/16/18	0.00	0.00	Packaging3-2		9-89
240	QC21-FG	4 Ea		3/16/18	0.00	0.00	QC21		GA081

Part Op 100 - 1-Cut as per Dwg Dwg Rev: 2 Prog Rev: 2 2-Deburr if necessary
Descriptions: 120 - 1-Machine as per folio FB 858 FOLIO REV: 4A DWG REV: 2 2-Engrave
3-Broach 4-Deburr
170 - Heat treat to RC 40-44 1--Issue P/O to Metcore ; P/O 39314 RC 2-Bead blast 3-
Certificate of Conformity is required ***NOTE*** DROP SHIP TO FINISHER Metcore to ship directly to Groupe Altech or
ATG
200 - -Issue P/O to Groupe Altech; PO 39409 -Black oxide finish, MIL-C-13924C Class 1 -Certificate of
Conformity is required
230 - Identify and Stock

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
M4130NS.250	4130 Sheet .250	7.6640 sf (1.916 ea)	90-Start up Operation	

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	M4130NS.250	8	28	0

Part Specifications

Specifications could not be found.

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	DEPARTMENT/PROCESS <table style="width:100%;"> <tr> <td style="width:50%;">Water Jet ☐</td> <td style="width:50%;">Engineering ☐</td> </tr> <tr> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Supplier ☐</td> <td></td> </tr> </table>	Water Jet ☐	Engineering ☐	Prod. Eng. Coord. ☐	Quality ☐	/Store/Packaging ☐	Other ☐	Supplier ☐	
Water Jet ☐	Engineering ☐									
Prod. Eng. Coord. ☐	Quality ☐									
/Store/Packaging ☐	Other ☐									
Supplier ☐										
Date: _____	Step #: _____									
Description Work Order _____		MRB (QSI042) Approval _____								
		Completed By _____								
		Lead hand / Supervisor Approval Verification _____								
		QC / QA Coordinator Approval _____								
Root Cause <table style="width:100%;"> <tr> <td style="width:50%;"> Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ </td> <td style="width:50%;"> No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐ </td> </tr> </table>		Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	CATEGORY <table style="width:100%;"> <tr> <td style="width:50%;"> Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ </td> <td style="width:50%;"> Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ </td> </tr> </table>	Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐				
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OTHER : _____										

DQA: _____ Date: _____



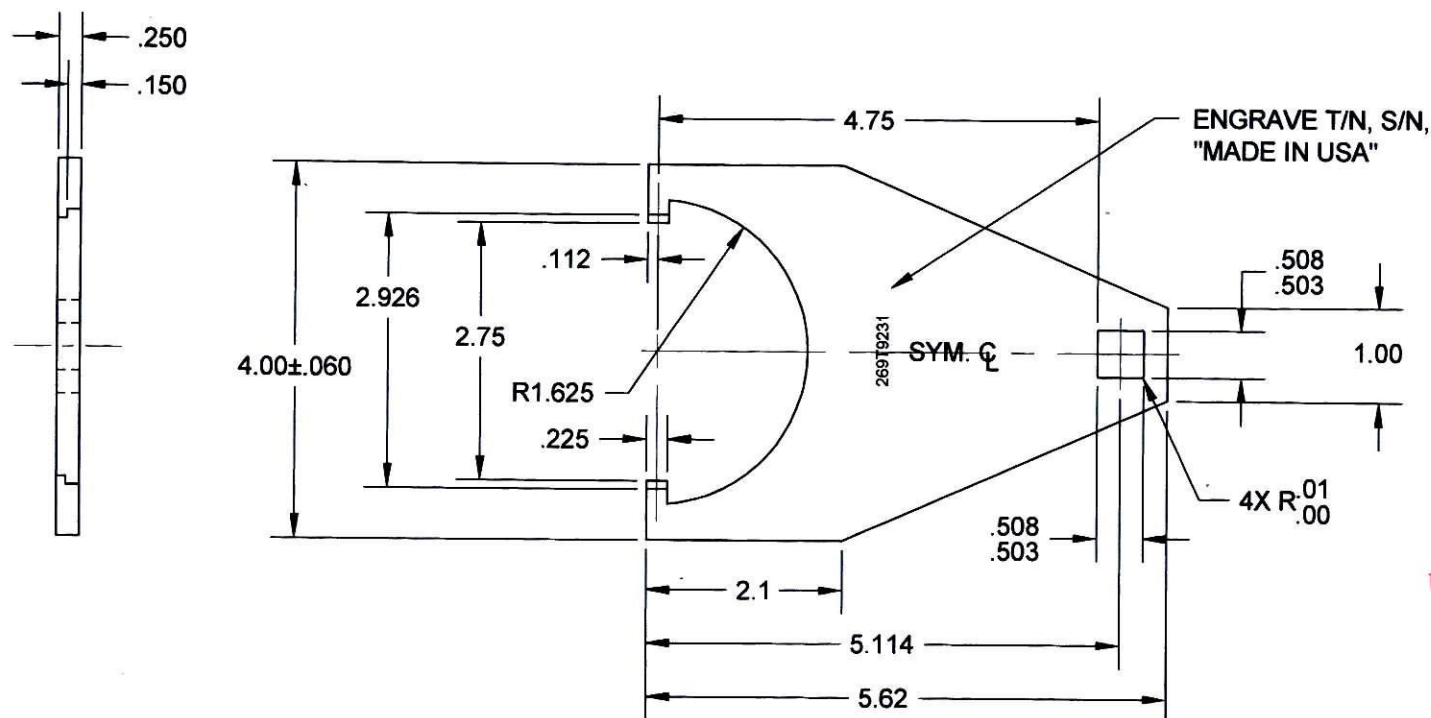
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

REVISIONS			
REV	DESCRIPTION	DATE	INITIAL
1	CH'D TITLEBLOCK & REVISION BLOCK. CH'D ENGRAVE NOTE.	6/8/09	RJC
1A	CH'D FINISH FROM BLACK OXIDE PER R.W.	9/13/11	RJC
2	ADDED NOTE TOOL USED ON 267A1340 NUT TO SHEET. DELETED NOTE CUT MATERIAL TO LENGTH WELD INTO STACKS BEVEL 2 ANGLES. DELETED Ø.375 HOLE. CH'D TITLE WAS WRENCH 269A1340 NUT IS M/R DROOP STOP NUT SPANNER WRENCH.	4/28/14	DPD



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 172431ML
18-02-16

NOTE:
TOOL USED ON 269A1340 NUT.

RED BARN MACHINE	
TITLE M/R DROOP STOP NUT SPANNER WRENCH	
DWG NO. 269T9231	REV 2
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
TOLERANCES ON: DECIMALS .XXX ± .010 .XX ± .03	
FRACTIONS ± 1/32 ANGLES ± 5°	
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES .015 x 45° PR .015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
DRAWN BY: COLE APPROVED: <i>D. Wed</i> HEAT TREAT: RC 40-44 FINISH SPEC: BLACK ZINC USED ON MODEL: SCHWEIZER	
SCALE: 1:2	DATE: 2-9-04 SHEET: 1 of 1

ASSY QTY	ASSY QTY	B/O	PART #	UNIT QTY	DESCRIPTION	MATERIAL	B/O INFORMATION OR SPECIFICATIONS
			-1	1	WRENCH	4130	4 x 5.75 x 1/4
ASSY #							

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
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		OTHER : ☐			



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

PO039314

Supplier: MEI001-VC
Metcor Inc.
560 Boul. Arthur Sauve
Saint-Eustache
QC
J7R 5A8 Canada
Phone: 450 473 1884
Fax: 450 491 5498

PO No: PO039314

PO Date: 3/14/18

Due Date: 3/30/18

Purchase Order

Revision:

Revision Date:

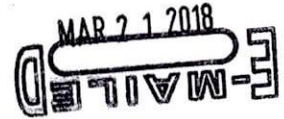
Ship-To Contact: Tsimiklis, Chrisoula

Via: Ground

Pynt Terms: Net 30

Freight Terms:

Special Comments:



Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Items

Line Item	Job	Part	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	172431	269T9231	M/R Droop Stop Nut Spanner Wrench Heat treat to RC 40-44 1--Issue P/O to Metcore ; P/O _____ RC _____ 2-Bead blast 3- Certificate of Conformity is required ***NOTE*** DROP SHIP TO FINISHER Metcore to ship directly to Groupe Altech or ATG	Firmed	3/30/18	4 pcs	0 pcs	4 pcs	\$75.00/pcs	\$300.00
Line Item Note Drop ship to Group Altech PART MADE FROM 4130 SHEET .250										
2		C45-4-2	Trunnion, Load Beam 1--Issue P/O to Metcore ; P/O _____ RC 42-46 2-Bead blast 3- Certificate of Conformity is required	Firmed	3/30/18	10 pcs	0 pcs	10 pcs	\$30.00/pcs	\$300.00
Line Item Note PART MADE FROM 4140H ROUND BAR 1"										
									Grand Total:	\$600.00

Order Notes



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO039409

Supplier: GRO002-VC
Group Altech
2455 Halpern
St Laurent
QC
H4S 1N9 Canada
Phone: 514-335-3666
Fax: 514-335-3868

PO No: PO039409
PO Date: 3/23/18
Due Date: 4/12/18
Purchase Order Revision:
Revision Date:
Ship-To Contact: Tsimiklis, ChrisoulaPhone:

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground
Pymt Terms: Net 30
Freight Terms:
Special Comments:

Items

Line Item	Job	Part	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	172431	269T9231	M/R Droop Stop Nut Spanner Wrench -Issue P/O to Groupe Altech; PO _____ -Black oxide finish, MIL-C-13924C Class 1 -Certificate of Conformity is required	Firmed	4/12/18	4 pcs	0 pcs	4 pcs	\$30.00/pcs	\$120.00
									Grand Total: \$120.00	

DAS
11
9-88

Order Notes

Procurement Quality Clauses
A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)

A022 Apical Processing
A024 process certifications
A026 certification of material conformance

A041 quality management system
A042 dart notification by supplier
A043 retension of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

CT

Plex 4/2/18 1:43 PM dart.tsimiklis.chrisoula



Certificat de Conformité / Certificate of Compliance

(008049-1)

2455, Rue Halpern | Saint-Laurent | Québec | H4S 1N9
 Tel: 514-335-3666 Fax: 514-335-3868
 www.groupaltech.com

Bon de Livraison / Packing Slip

008049- 1

Livré à / Ship to

DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY, ON, K6A1K7
 CANADA
 Tel.: 613-632-5200 Fax.:

Client / Customer:

DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY, ON, K6A1K7
 CANADA
 BUYER:

Date expédition Ship date		Créé Par Generated By		Transport / No de Compte Courrier / Acc. No.		Bon de commande Client Customer Purchase Order No.			
04-Apr-2018		Jessie Boisvert				PO039409			
#Ligne Line#	No. de Série / # Pièce Part Number /Line Item Details Job # / Ref #	Description pièce(s)		CATG. U/M	Comm. /Ordered	Exp/ Shipped	Qté NC/ NC Qty	Qté Scrap/	À venir/ Back Order
1	269T9231 Rev.	269T9231 BLACK OXIDE FINISH MIL-C-13924C CLASS 1		BLACK-OXIDE CH	4	4	0	0	0

Notes Additionnelles / Additional Notes

Epaisseur réelle
Actual Thickness

Inspecteur Qualité
Quality Inspector

Réçu par
Received By

Nous certifions que les pièces énumérées ci-dessus ont été traitées en conformité avec votre commande et vos spécifications et rencontrent les exigences.
 Notre responsabilité financière et légale ne sera pas supérieure au montant de la facture issue.

We hereby certify that the parts listed above have been process in accordance with your purchase order and specifications and are in conformance with your requirements
 Our financial and legal responsibility will not be higher than the amount of invoice.